List of Items Controlled

Unit: Kilograms

Related Controls: (1) See ECCNs 1E001 ("development" and "production") and 1E201 ("use") for technology for items controlled by this entry. (2) Nickel powder and porous nickel metal, specially designed or prepared for use in separating uranium isotopes, are subject to the export licensing authority of the Nuclear Regulatory Commission (see 10 CFR part 110).

Related Definitions: N/A

ECCN Controls: This entry does not control the following:

- a. Filamentary nickel powders;
- b. Single porous nickel sheets with an area of $1,000 \text{ cm}^2$ per sheet or less.

Items:

- a. Nickel powder having both of the following characteristics:
- a.1. A nickel purity content of 99.0% or greater by weight; and
- a.2. A mean particle size of less than 10 micrometers measured by American Society for Testing and Materials (ASTM) B330 standard;
- b. Porous nickel metal produced from materials controlled by 1C240.a.

Technical Note: 1C240.b refers to porous metal formed by compacting and sintering the materials in 1C240.a to form a metal material with fine pores interconnected throughout the structure.

1C350 Chemicals that may be used as precursors for toxic chemical agents.

License Requirements:

Reason for Control: CB, CW, AT

Control(s) Country Chart

CB applies to entire entry

CB Column 2

CW applies to 1C350.a, .b, and .c. Commerce Country Chart is not designed to determine licensing requirements for items controlled for CW reasons. A license is required, for CW reasons, to export or reexport Schedule 1 chemicals and mixtures identified in 1C350.a to all destinations, including Canada. A license is required, for CW reasons, to export or reexport Schedule 2 chemicals and mixtures identified in 1C350.b to States not Party to the CWC (destinations *not* listed in Supplement No. 2 to part 745 of the EAR). A license is required, for CW reasons, to export Schedule 3 chemicals and mixtures identified in 1C350.c to States not Party to the CWC, unless an End-Use Certificate issued by the government of the importing country has been obtained by the exporter prior to export. A license is required, for CW reasons, to reexport Schedule 3 chemicals and mixtures identified in 1C350.c from a State not Party to the CWC to any other State not Party to the CWC. (See §742.18 of the EAR for license requirements and policies for toxic and precursor chemicals controlled for CW reasons. See §745.2 of the EAR for End-Use Certificate requirements that apply to exports of Schedule 3 chemicals to countries not listed in Supplement No. 2 to part 745 of the EAR.)

AT applies to entire entry. The Commerce Country Chart is not designed to determine licensing requirements for items controlled for AT reasons in 1C350. A license is required, for AT reasons, to export or reexport items controlled by 1C350 to Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria. (See part 742 of the EAR for additional information on the AT controls that apply to Iran, North Korea, Sudan, and Syria. See part 746 of the EAR for additional information on the comprehensive trade sanctions that apply to Cuba, Iran, Iraq, and Libya.)

License Requirement Notes:

1. SAMPLE SHIPMENTS: Subject to the following requirements and restrictions, a license

is not required for sample shipments when the cumulative total of these shipments does not exceed a 55-gallon container or 200 kg of a single chemical to any one consignee during a calendar year. A consignee that receives a sample shipment under this exclusion may not resell, transfer, or reexport the sample shipment, but may use the sample shipment for any other legal purpose unrelated to chemical weapons.

a. Chemicals Not Eligible:

A. CWC Schedule 1 chemicals (all destinations). The CWC Schedule 1 chemicals identified in 1C350.a are *not* eligible for sample shipment to any destination without a license.

- B. CWC Schedule 2 chemicals (States not Party to the CWC). No CWC Schedule 2 chemical or mixture identified in 1C350.b is eligible for sample shipment to States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745 of the EAR) without a license.
- b. *Countries Not Eligible*: The following countries are *not* eligible to receive sample shipments of any chemicals controlled by this ECCN without a license: Cuba, Iran, Iraq, Libya, North Korea, Sudan, Syria.
- c. Sample shipments that require an End-Use Certificate for CW reasons: No CWC Schedule 3 chemical or mixture identified in 1C350.c is eligible for sample shipment to States not Party to the CWC (destinations not listed in Supplement No. 2 to part 745 of the EAR) without a license, unless an End-Use Certificate issued by the government of the importing country is obtained by the exporter prior to export (see §745.2 of the EAR for End-Use Certificate requirements).
- d. Sample shipments that require a license for reasons set forth elsewhere in the EAR: Sample shipments, as described in this Note 1, may require a license for reasons set forth elsewhere in the EAR. See, in particular, the end-

use/end-user restrictions in part 744 of the EAR, and the restrictions that apply to embargoed countries in part 746 of the EAR.

e. Quarterly report requirement. The exporter is required to submit a quarterly written report for shipments of samples made under this Note 1. The report must be on company letterhead stationery (titled "Report of Sample Shipments of Chemical Precursors" at the top of the first page) and identify the chemical(s), Chemical Abstract Service Registry (C.A.S.) number(s), quantity(ies), the ultimate consignee's name and address, and the date exported. The report must be sent to the U.S. Department of Commerce, Bureau of Industry and Security, P.O. Box 273, Washington, DC 20044, Attn: "Report of Sample Shipments of Chemical Precursors".

2. MIXTURES:

- a. Mixtures that contain precursor chemicals identified in ECCN 1C350, in concentrations that are below the levels indicated in 1C350.a through .d, are controlled by ECCN 1C395 or 1C995 and are subject to the licensing requirements specified in those ECCNs.
- b. A license is not required for mixtures controlled under this ECCN when the controlled chemical in the mixture is a normal ingredient in consumer goods packaged for retail sale for personal use. Such consumer goods are classified as EAR99.
- c. A license is not required for mixtures containing less than 0.5% aggregate quantities, by weight, of the CWC Schedule 1 chemicals controlled by 1C350.a as unavoidable by-products or impurities. Such mixtures are classified as EAR99. All other mixtures containing these Schedule 1 chemicals are controlled by 1C350.a.
- **Note to Mixtures**: Calculation of concentrations of AG-controlled chemicals:
 - a. Exclusion. No chemical may be added

to the mixture (solution) for the sole purpose of circumventing the Export Administration Regulations;

- b. Percent Weight Calculation. When calculating the percentage, by weight, of components in a chemical mixture, include all components of the mixture, including those that act as solvents.
- 3. COMPOUNDS. Compounds created with any chemicals identified in this ECCN 1C350 may be shipped NLR (No License Required), without obtaining an End-Use Certificate, unless those compounds are also identified in this entry or require a license for reasons set forth elsewhere in the EAR.
- 4. TESTING KITS: Certain medical, analytical, diagnostic, and food testing kits containing small quantities of chemicals identified in this ECCN 1C350, except chemicals identified as Schedule 1 chemicals under the CWC, are excluded from the scope of this ECCN and are controlled under ECCN 1C395 or 1C995. (Note that replacement reagents for such kits are controlled by this ECCN 1C350 if the reagents contain one or more of the precursor chemicals identified in 1C350 in concentrations equal to or greater than the control levels for mixtures indicated in 1C350.)

Technical Notes: 1. For purposes of this entry, a "mixture" is defined as a solid, liquid or gaseous product made up of two or more components that do not react together under normal storage conditions.

2. The scope of this control applicable to Hydrogen Fluoride (see 1C350.d.7 in the List of Items Controlled) includes its liquid, gaseous, and aqueous phases, and hydrates.

License Exceptions

LVS: N/A GBS: N/A CIV: N/A

List of Items Controlled

Unit: Liters or kilograms, as appropriate Related Controls: 1C350.a controls certain CWC Schedule 1 chemicals (see §742.18 of the EAR). The U.S. Government must provide advance notification and annual reports to the OPCW of all exports of Schedule 1 chemicals. See §§742.18 and 745.1 of the EAR for notification and annual report requirements. See 22 CFR part 121, Category XIV and §121.7 for additional CWC Schedule 1 chemicals controlled by the Department of State. Also see ECCNs 1C355, 1C395, and 1C995.

Related Definitions: See §770.2(k) of the EAR for synonyms for the chemicals listed in this entry.

Items:

- a. Australia Group-controlled precursor Chemicals also identified as Schedule 1 chemicals under the CWC, as follows, and mixtures containing any amount of the following chemicals, except mixtures that contain less than 0.5% aggregate quantities (by weight) of these chemicals as unavoidable by-products or impurities (i.e., the Schedule 1 chemicals are not intentionally produced or added):
- a.1. (C.A.S. #57856-11-8) 0-Ethyl-2-diisopropylaminoethyl methyl phosphonite (QL);
- a.2. (C.A.S. #753-98-0) Ethyl phosphonyl difluoride;
- a.3. (C.A.S. #676-99-3) Methyl phosphonyl difluoride.
- b. Australia Group-controlled precursor chemicals also identified as Schedule 2 chemicals under the CWC, as follows, and mixtures in which at least one of the following chemicals constitutes 30 percent or more of the weight of the mixture:

- b.1. (C.A.S. #7784-34-1) Arsenic trichloride;
 - b.2. (C.A.S. #76-93-7) Benzilic acid;
- b.3. (C.A.S. #78-38-6) Diethyl ethylphosphonate;
- b.4. (C.A.S. #15715-41-0) Diethyl methylphosphonite;
- b.5. (C.A.S.#2404-03-7) Diethyl-N,N-dimethylphosphoroamidate;
- b.6. (C.A.S. #5842-07-9) N,N-Diisopropyl-beta-aminoethane thiol;
- b.7. (C.A.S. #4261-68-1) N,N-Diisopropyl-beta-aminoethyl chloride hydrochloride;
- b.8. (C.A.S. #96-80-0) N,N-Diisopropyl-beta-aminoethanol;
- b.9. (C.A.S. #96-79-7), N,N-Diisopropyl-beta-aminoethyl chloride;
- b.10. (C.A.S. #6163-75-3) Dimethyl ethylphosphonate;
- b.11. (C.A.S. #756-79-6) Dimethyl methylphosphonate;
- b.12. (C.A.S. #1498-40-4) Ethyl phosphonous dichloride [Ethyl phosphinyl dichloride];
- b.13. (C.A.S. #430-78-4) Ethyl phosphonus difluoride [Ethyl phosphinyl difluoride];
- b.14. (C.A.S. #1066-50-8) Ethyl phosphonyl dichloride;
- b.15. (C.A.S. #676-83-5) Methyl phosphonous dichloride [Methyl phosphinyl dicloride];

- b.16. (C.A.S. #753-59-3) Methyl phosphonous difluoride [Methyl phosphinyl difluoride];
- b.17. (C.A.S. #676-97-1) Methyl phosphonyl dichloride;
 - b.18. (C.A.S. #464-07-3) Pinacolyl alcohol;
 - b.19. (C.A.S. #1619-34-7) 3-Quinuclidinol;
 - b.20. (C.A.S. #111-48-8) Thiodiglycol.
- c. Australia Group-controlled precursor chemicals also identified as Schedule 3 chemicals under the CWC, as follows, and mixtures in which at least one of the following chemicals constitutes 30 percent or more of the weight of the mixture:
 - c.1. (C.A.S. #762-04-9) Diethyl phosphite;
- c.2. (C.A.S. #868-85-9) Dimethyl phosphite (dimethyl hydrogen phosphite);
- c.3. (C.A.S. #10025-87-3) Phosphorus oxychloride;
- c.4. (C.A.S. #10026-13-8) Phosphorus pentachloride;
- c.5. (C.A.S. #7719-12-2) Phosphorus trichloride;
- c.6. (C.A.S. #10025-67-9) Sulfur monochloride;
- c.7. (C.A.S. #10545-99-0) Sulfur dichloride;
 - c.8. (C.A.S. #7719-09-7) Thionyl chloride;
 - c.9. (C.A.S. #102-71-6) Triethanolamine;
- c.10. (C.A.S. #122-52-1) Triethyl phosphite;
 - c.11. (C.A.S. #121-45-9) Trimethyl

phosphite.

- d. Other Australia Group-controlled precursor chemicals not also identified as Schedule 1, 2, or 3 chemicals under the CWC, as follows, and mixtures in which at least one of the following chemicals constitutes 30 percent or more of the weight of the mixture:
- d.1. (C.A.S. #1341-49-7) Ammonium hydrogen fluoride;
 - d.2. (C.A.S. #107-07-3) 2-Chloroethanol;
- d.3. (C.A.S. #100-37-8) N,N-Diethylaminoethanol;
- d.4. (C.A.S. #108-18-9) Disopropylamine;
 - d.5. (C.A.S. #124-40-3) Dimethylamine:
- d.6. (C.A.S. #506-59-2) Dimethylamine hydrochloride;
- d.7. (C.A.S. #7664-39-3) Hydrogen fluoride;
- d.8. (C.A.S. #3554-74-3) 3-Hydroxyl-1-methylpiperidine;
 - d.9. (C.A.S. #76-89-1) Methyl benzilate;
- d.10. (C.A.S. #1314-80-3) Phosphorus pentasulfide;
 - d.11. (C.A.S. #75-97-8) Pinacolone;
- d.12. (C.A.S. #151-50-8) Potassium cyanide;
- d.13. (C.A.S. #7789-23-3) Potassium fluoride;
- d.14. (C.A.S. #7789-29-9) Potassium bifluoride;

- d.15. (C.A.S. #3731-38-2) 3-Quinuclidone;
- d.16. (C.A.S. #1333-83-1) Sodium bifluoride;
 - d.17. (C.A.S. #143-33-9) Sodium cyanide;
 - d.18. (C.A.S. #7681-49-4) Sodium fluoride;
 - d.19. (C.A.S. #1313-82-2) Sodium sulfide;
- d.20. (C.A.S. #637-39-8) Triethanolamine hydrochloride;

1C351 Human and zoonotic pathogens and "toxins", as follows (see List of Items Controlled).

License Requirements

Reason for Control: CB, CW, AT

Control(s)

Country Chart

CB applies to entire entry CB Column 1

CW applies to 1C351.d.5 and d.6 and a license is required for CW reasons for all destinations, including Canada, as follows: CW applies to 1C351.d.5 for ricin in the form of 1) Ricinus Communis Agglutinin_{II} (RCA_{II}), also known as ricin D or Ricinus Communis Lectin_{III} (RCL_{III}); and 2) Ricinus Communis Lectin_{IV} (RCL_{IV}), also known as ricin E. CW applies to 1C351d.6 for saxitoxin identified by C.A.S. #35523-89-8. See §742.18 of the EAR for licensing information pertaining to chemicals subject to restriction pursuant to the Chemical Weapons Convention (CWC). The Commerce Country Chart is not designed to determine licensing requirements for items controlled for CW reasons.

AT applies to entire entry AT Column 1